



PATENT

Attorney Docket No. 206579

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:  
Kiesewetter et al.

Art Unit: 1635

Application No. 09/646,651

Examiner: J. Schultz

Filed: January 16, 2001

For: METAL-CONTAINING  
RIBONUCLEOTIDE POLYPEPTIDES

**PENDING CLAIMS AFTER AMENDMENTS  
MADE IN RESPONSE TO OFFICE ACTION DATED JANUARY 7, 2003**

8. An isolated or purified metal-containing ribonucleotide protein (RPN) containing a protein from the family of S100 proteins, an RNA and a copper ion, wherein the RPN is in the form of a ternary complex, wherein the RNA has a nucleotide sequence having a consensus nucleotide sequence of SEQ ID NO: 2, and wherein the protein (i) has two EF hand motifs and a zinc(II) ion binding site and (ii) specifically binds to the RNA.

9. A process for producing an isolated or purified metal-containing according to claim 8, characterized in that leucocytes or inflammation tissue is homogenized or leucocytes are cultivated and the resulting RNP is recovered from the homogenates or from the supernatant of the culture solution by standard methods.

11. The isolated or purified metal-containing RPN of claim 8, wherein the nucleotide sequence having a consensus nucleotide sequence of SEQ ID NO: 2 is SEQ ID NO: 3.

12. The isolated or purified metal-containing RPN of claim 8, wherein the protein has the amino acid sequence of SEQ ID NO: 1.

13. The isolated or purified metal-containing RPN of claim 11, wherein the protein has the amino acid sequence of SEQ ID NO: 1.

14. A medicament comprising the metal-containing ribonucleotide protein (RPN) of claim 8 and/or a molecular-biological equivalent and/or fragment and/or derivative thereof.

15. A method of inducing directional growth of a blood vessel in a tissue, which method comprises administering to a tissue the medicament of claim 14 in an amount sufficient to induce directional growth of a blood vessel in the tissue, whereupon directional growth of a blood vessel in the tissue is induced.

16. The method of claim 15, wherein the tissue is in a mammal.

17. The method of claim 16, wherein the mammal is a human.

18. A method of inducing neovascularization of a tissue, which method comprises administering to a tissue the medicament of claim 14 in an amount sufficient to induce neovascularization of the tissue, whereupon neovascularization of the tissue is induced.

19. The method of claim 18, wherein the tissue is in a mammal.

20. The method of claim 19, wherein the mammal is a human.

21. A method of regulating angiogenesis in a tissue, which method comprises administering to a tissue the medicament of claim 14 in an amount sufficient to regulate angiogenesis in the tissue, whereupon angiogenesis in the tissue is regulated.

22. The method of claim 21, wherein the tissue is in a mammal.

23. The method of claim 22, wherein the mammal is a human.

24. A method of regulating repair of a tissue, which method comprises administering to a tissue the medicament of claim 14 in an amount sufficient to regulate repair of the tissue, whereupon repair of the tissue is regulated.

25. The method of claim 24, wherein the tissue is in a mammal.

26. The method of claim 25, wherein the mammal is a human.

27. A method of regulating wound healing in a tissue, which method comprises administering to a tissue the medicament of claim 14 in an amount sufficient to regulate wound healing in the tissue, whereupon wound healing in the tissue is regulated.

28. The method of claim 27, wherein the tissue is in a mammal.

29. The method of claim 28, wherein the mammal is a human.